

Amendments to the Specification

Please replace the paragraph beginning on page 1, line 11, with the following rewritten paragraph:

There has been known an image reading device for use in an electronic ~~whiteboard~~. whiteboard. The image reading device includes a scanner and a comparator. The scanner includes a plurality of sensor elements aligned in a single row for optically reading the image on the board. The optical sensors pick up an image and output an image signal accordingly. The comparator compares the image signal from the sensor elements with a predetermined threshold value to produce binary data of the image signal. That is, the comparator judges a pixel to be white or black based on the threshold value.

Please replace the paragraph beginning on page 3, line 2, with the following rewritten paragraph:

Therefore, adjustments must be made before the scanner is used to correctly read images, in order to increase the image signal level as appropriate for the threshold level curve V_0 . For the adjustment, the scanner is used to scan a white reference surface disposed at the image reading position of the device, to read an image signal level curve V_2 shown in Fig. 1(b). Then, the image signal level is adjusted so that a maximum value V_{2max} of the image signal level curve V_2 ~~can~~ matches the above-described maximum value V_{max} , to produce a corrected image level curve $V_{2corrected}$ as shown in Fig. 1(c). After the adjustment of the image signal level, the image reading device is actually used to read images, and the actual image signal level curve is compared with the already stored threshold level curve V_0 to produce an output of binary image data.

Please replace the paragraphs beginning on page 4, line 7, with the following rewritten paragraphs:

With this state, if the curve V2 is modified so that the maximum value V2max of the image signal level curve V2 ~~can~~ matches the above-described maximum value Vmax as shown in Fig. 5(e), Fig. 1(c), a broken line curve V3 in Fig. 1(c) which corresponds to the broken line curve V1' exceeds the maximum readable range Vmax.

In the factory before shipping, assuming that there is a black color area in a whiteboard, and a black dot is shown as an image signal level. This black dot is located below the threshold level curve VO as shown in Fig. 1(a), so that the determination falls within a black color range. On the other hand, after the ~~above-described~~ above-described adjustment, the black dot is positioned above the threshold level curve VO as shown in Fig. 1(c) due to excessive adjustment of the image signal level, so that the determination falls within a white color range. In summary, due to the excessive adjustment, the read image data may produce an entirely white or pale image in comparison with the actual image drawn on the whiteboard.

Please replace the paragraph beginning on page 11, line 1, with the following rewritten paragraph:

The whiteboard 3 includes a sheet member 11 on which figures and characters are drawn, upper and lower rollers (not shown) for supporting the sheet member 11, a sheet member feed motor 15 for feeding the sheet member 11 upward and downward, and a contact image sensor (CIS) 13 for reading figure and character ~~image~~ images drawn on the sheet member 11 and outputting image data ~~signals~~ signals accordingly. The sheet member 11 is in the form of an endless web with a confronting front and rear sides. The thermal printer 5 includes a thermal head 21 with a plurality of heat generating elements, and a sheet feed motor 23 for feeding the heat-sensitive sheet. The main controller 7 includes a

central processing unit (CPU) 31, a read only memory (ROM) 33, and a random access memory (RAM) 35.

Please replace the paragraphs beginning on page 13, line 24, with the following rewritten paragraphs:

Fig. 3 is a flowchart representing processes performed in the correction coefficient determination routine. First, an actual white image signal level curve V2 is retrieved in S10 using a surface of the sheet member 11 as a white reference surface where no image is drawn. Next, in S20 the actual white image signal level curve V2 is compared with the reference image signal level curve V1 stored in the ROM 33. Then, whether or not the two curves V1, V2 match each other is judged in S30. If not (S30:NO), then in S40 the actual white image signal level curve V2 is increased by a small amount ΔV (%), and in S50 a correction coefficient K is calculated based on the value of ΔV and stored in the RAM 35. That is, the correction coefficient K is first set to 1, and then increased in S50 to a value greater than 1 using the formula $K + \Delta V / 100$.

In S60, the present white image signal level curve V2 is again compared with the reference image signal level curve V1. Then it is judged whether or not at least a portion of the curves V1 and V2 match. If it is judged that there are no matching ~~portion~~ portions between curves V1 and V2 (S70:NO), then the routine returns to S40, whereupon the present white image signal level curve V2 is again increased by the small amount ΔV (%) in S40, and the correction coefficient K is calculated in S50.

The processes of S40 to S70 are repeated until it is judged that at least a portion of the curves V1 and V2 match. It should be noted that the two curves V1 and V2 "match" implies that a part of the curve V2 overlaps with a part of the curve V1 within the range of plus minus $\Delta V1$ (where $\Delta V1$ is a predetermined small amount) as a result of the successive change of the curve V2 by the step S50. When it is judged that a portion of the

curves V1 and V2 match (S70:YES), then the correction coefficient K stored in the RAM 35 at this time is set in S80 as the coefficient to be multiplied by the output signal from the CIS 13 when an image is actually read.

Please replace the paragraph beginning on page 16, line 15, with the following rewritten paragraph:

The correction coefficient determination routine is performed when the light receiving elements of the CIS 13 degrade over time, so that the output signal from the light receiving elements weakens. An image signal level curve V2 can be obtained, if the light receiving elements are degraded over time and if certain areas of the sheet member 11 are stained when the image of the sheet member 11 at the read position of the CIS 13 is read to perform the correction coefficient determination routine. The correction coefficient determination routine determines the correction coefficient K by increasing such an image signal level curve V2 by increments of the small amount $\Delta VAV(\%)$ until finally, as shown in Fig. 4(c), the image signal level curve V2 partially matches the reference image signal level curve V1.